

# The Värmland-Hedmark Cluster and a Neighboring Branch (July 2022)

## Confidence intervals for age estimates

The age estimates in the tree are from my (Johan Lagerlöf's) own calculations—see Nos. 6 and 7 of the VHC newsletter for some discussion. The estimates are based on the number of SNPs in the combBED region, as reported by YFull (YTree v10.04.00) and YSEQ. Below are confidence intervals at the 50%, 90%, and 95% levels (some of them are not available due to technical problems):

|     | 95% CI      | 90% CI      | 50% CI      |
|-----|-------------|-------------|-------------|
| A1: | n.a.        | n.a.        | n.a.        |
| A2: | n.a.        | n.a.        | n.a.        |
| A3: | n.a.        | n.a.        | n.a.        |
| A4: | 421 — 1335  | 517 — 1239  | 758 — 1046  |
| A5: | 1134 — 1778 | 1195 — 1738 | 1385 — 1596 |
| A6: | 1010 — 1797 | 1138 — 1729 | 1296 — 1578 |
| A7: | n.a.        | n.a.        | n.a.        |
| A8: | 727 — 1656  | 864 — 1592  | 1084 — 1376 |
| A9: | 1248 — 1889 | 1320 — 1833 | 1533 — 1749 |

## SNPs that define the branches

The Värmland-Hedmark cluster is a twig on the R1b branch of the human Y chromosome haplotree: R1b → M269 → U106 → Z18 → S11601 → Y112538 → Y130179. For more information, see [www.johanlagerlof.com/gengen](http://www.johanlagerlof.com/gengen). The branches shown in the tree are defined by the SNPs listed below (an asterisk indicates that the SNP is located outside of the so-called combBED region of the Y chromosome, and it is therefore not used by YFull for age estimation; an "(H)" means that the SNP is located in a homologous region—i.e., one that is similar to other regions on the Y chromosome or on other chromosomes—and therefore is less reliable). The named ancestors for Tester 15 are still uncertain—we will do further DNA testing to try to have the names confirmed.

- ◇ A1: Y86344, Y107658\*
- ◇ A2: Y100873\*, Y128033, Y101814\*, Y103246, Y130179, Y83455, Y125815\*
- ◇ A3: Y112538, Y129064
- ◇ A4: BY71612, Y159325, BY116275, BY146620, BY78202, BY99722, BY100142, BY102070
- ◇ A5: FT146431
- ◇ A6: BY12164
- ◇ A7: A25847\*
- ◇ A8: A25843, A25844, A25845, Y126692(H)\*
- ◇ A9: FTA19875\*, FTA18226(H), A29538(H)\*

A3 (~ 3)

A4 (~ 902)

A2 (~ 1014)

